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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,149	07/31/2003	Phillip B. Blankenship	506422-0113	2224

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EXAMINER

MILLER, DANIEL H

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,149

Applicant(s)

BLANKENSHIP ET AL.

Examiner

Daniel Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/22/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Maier (UK 1448158).

3. Maier teaches a paved surface having 12% natural sand and bitumen binder (page 1 line 70-75 and page 4 line 5-10).

4. It has been held that where the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially identical processes, a *prima facie* case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The ***prima facie*** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). Therefore, the paved surface disclosed by the reference should have substantially similar results when subjected to stability and fatigue tests.

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5. Regarding claim 2, the binder contains asphalt and a polymer (polyamide) (see claim 1).

6. Regarding claim 6, the layer is inherently substantially impermeable.

Claim Rejections - 35 USC § 103

7. Claims 1-2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier in view of Cramwinckel (U.S. 3,822,556).

8. Regarding claim 1, Maier teaches a paved surface having 12% natural sand and bitumen binder (page 1 line 70-75 and page 4 line 5-10).

9. Maier is silent as to the stability and fatigue levels of the pavement. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the composition of the aggregate in order to optimize the stability and fatigue level of the pavement for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

10. Regarding claim 2, the binder contains asphalt and a polymer (polyamide) (see claim 1).

11. Regarding claim 6, the layer is inherently substantially impermeable.

12. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier in view of Cramwinckel (U.S. 3,822,556).

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13. Maier is silent as to the selection of binder based on climate, or the stability and fatigue levels of the pavement.

14. Cramwinckel teaches asphalt with a bitumen binder that is impermeable to water with a thickness of 2.5 cm (column 1 line 30-35, column 2 line 45-50).

15. Cramwinckel further teaches that the bitumen binder can be prepared from any suitable material (column 2 line 63-68) and can be adapted to the climate conditions (column 3 line 1-4). Regarding claim 6, Cramwinckel further teaches the asphalt is impermeable to water (column 1 line 30-35).

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maier to any binder that would be appropriate for applications under particular climates.

17. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier in view of Malloy et al (U.S. 6,669,773).

18. Regarding claim 1, Maier teaches a paved surface having 12% natural sand and bitumen binder (page 1 line 70-75 and page 4 line 5-10).

19. Maier is silent as to the aggregate asphalt comprising less than 10% or 5% natural sand.

20. Malloy teaches a synthetic lightweight aggregate (SLA) used as a substitute for sand in paving construction (column 1 line 10-20; column 9 line 10-25). The aggregate

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has the advantage of being a cheaper recycled material and favored in applications where weight is a concern (column 1 line 26-33 and 48-54).

21. Therefore, since it was known at the time of the invention to use a light weight aggregate as a replacement for all or some of the sand in an asphalt pavement application it would have been obvious to one of ordinary skill in the art to replace all or some of the sand for cheaper and lower density material such as light weight aggregate.

Response to Arguments

22. Applicant's arguments filed 9/22/2006 have been fully considered but they are not persuasive. Applicant has failed to show that the art of record (Maier) does not possess the properties as claimed by applicant. Applicant's claim includes less than 15% natural sand and asphalt binder, which is consistent with the prior art of Maier. Applicant has not offered any substantive reasoning as to why Maier would not possess similar characteristics as it meets all structural limitations set forth in the claim. The fact that the structural limitations of the prior art is commensurate with the claims is the basis for reasoning of inherency.

23. "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Applicant has not addressed what compositional differences would cause the art of record to not have the same inherent stability.

24. Regarding the 103 rejection in view of Cramwinckel (U.S. 3,822,556), the motivation to combine is found in the teaching that it is known to choose binders based upon the various climate conditions in outdoor aggregates, such as asphalts.

25. Regarding the 103 rejection in view of Malloy et al (U.S. 6,669,773), Malloy teaches a synthetic lightweight aggregate (SLA) used as a substitute for sand in paving construction (column 1 line 10-20; column 9 line 10-25). The aggregate has the advantage of being a cheaper recycled material and favored in applications where weight is a concern (column 1 line 26-33 and 48-54).

26. Therefore, since it was known at the time of the invention to use a light weight aggregate as a replacement for all or some of the sand in an asphalt pavement application it would have been obvious to one of ordinary skill in the art to replace all or some of the sand for cheaper and lower density material such as light weight aggregate.

27. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

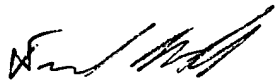
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Miller whose telephone number is (571)272-1534. The examiner can normally be reached on M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571)272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Miller



JENNIFER MCNEIL
SUPERVISORY PATENT EXAMINER
11/30/06